NORTHERN TESTING LABORATORIES, INC.

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8005 SCHOON STREET
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July 12, 2001

U.S. Environmental Protection Agency
Attn: Kristine Karlson
1200 Sixth Avenue
Seattle, WA 98101

Re: NPDES Permit AK-002139-3, Williams Alaska Petroleum, Inc., Industrial Compliance Monitoring and Inspection Report

Dear Ms. Karlson:

Enclosed are the completed results for the Williams Alaska Petroleum, Inc. industrial compliance monitoring and inspection samples collected on May 23, 2001 as required semiannually in section I.B. of NPDES Permit AK-002139-3. Gerald Voigt, Corporate Quality Assurance Manager (NTL), performed an evaluation of the sulfolane analysis and his report is also included. Samples were collected by Marylou Richard of NTL and Kelly Dygert of Williams Alaska Petroleum, and witnessed by Michael Pollen of NTL, Randy Johnson of the City of North Pole, and Dave Guinn of Williams Alaska Petroleum. The following table lists the sample collection methods:

Parameter	Units	Type of Sample
Flow	gpd	Recording flow meter
Oil & Grease	mg/L	Grab
Ammonia (as N)	mg/L	24-hour flow proportioned composite
TSS	mg/L	24-hour flow proportioned composite
BOD_5	mg/L	24-hour flow proportioned composite
COD	mg/L	24-hour flow proportioned composite
BTEX	µg/L	Grab
Conductivity	µmhos/cm	Grab
pH	pH units	Grab
Metals	mg/L	24-hour flow proportioned composite

Results for flow, conductivity and pH tests are presented in Table 1.

Equipment Inspection: Aerated lagoon Cell A appeared to have a good air pattern. A section of the floating baffle curtain is detached from the anchors and is floating in the cell. Two air blowers are on-line, however dissolved oxygen is still approximately 0.1 mg/L. Hydrogen peroxide is being injected into the crossover between Cells A and C to increase the oxygen concentration and help reduce sulfolane levels. Water levels in all of the lagoon

cells have been raised in an effort to increase detention time and slow the effluent flow to the City of North Pole.

Aerated lagoon Cell B is still isolated from the flow path and full of wastewater containing high concentrations of sulfolane. During the inspection on June 22, 2000, it was noted that Cell B had three "whales", or floating sections of liner, indicating air was being discharged under the liner. The whales are still present in the lagoon Cell B.

Cell C, from which the effluent discharges to the City of North Pole was full and the curtain baffles intact. A photo log of the equipment inspection and sample collection is enclosed with this report.

Table 1

Williams Alaska Petroleum Effluent Monitoring: 05/24/01 On Site Data

Parameter	Units	Result *	Instrument or Method
Flow	gpd	85,536	Flow Monitor **
Conductivity	µmhos/cm	**9,400**	Hach conductivity meter
pH	pH units	**7.8**	Corning pH meter
Temperature	°C	**22.2**	Corning pH meter

* NTL reported values, shown in bold type, were read within one hour of sample collection using instruments at the North Pole Lagoon monitoring laboratory.

** Refinery control room meter reading = 59.4 gpm x 1,440 minutes/day.

To help determine the relative precision of the analysis of these samples, selected data from the Williams laboratory and NTL laboratory were compared. These data comparisons and the relative percent difference (RPD) between these results are presented in Table 2.

Table 2

Comparative Data from Williams and NTL Labs on 5/23/2001 samples

Parameter	NTL Result	Williams Result	Relative % Diff.
Ammonia (as N), mg/L	29	22.25*	26%
Arsenic, mg/L	0.036	0.033	9%
BOD, 5-Day, mg/L	310	236	27%
COD, mg/L	660	640	3%
Conductivity, µmhos/cm	9,400	8,951	5%
pH, pH units	7.8	7.8	0%
TSS, mg/L	41	50	20%
Zinc mg/L	0.06	0.047	24%

* Reported in Second Quarter 2001 Wastewater Compliance Report, 5/31/01.

Not all trace metals were compared since nearly all of the data from both labs were below the method detection limits for those analyses.

The RPD data show that for most parameters, the comparability is good (within 10 - 25%). NTL reported a benzene result of 0.40 µg/L while Williams reported non-detect for BTEX parameters. Both are well below the regulatory limit of 100 µg/L.

The biological oxygen demand (5-day) results from both laboratories exceed the pretreatment permit limit of 200 mg/L. This is likely due to high sulfolane levels reported in a June 25, 2001 letter from Williams Alaska Petroleum, Inc. to Sharon Wilson of the U.S. Environmental Protection Agency. From April 23 to May 28, 2001, sulfolane concentrations were well above 100 mg/L. All other parameters were found to be within the pretreatment permit limits. Please call me at 907-456-3116 if you have any questions regarding this report.

Sincerely,
Northern Testing Laboratories, Inc.

Marylou Richard, Environmental Consultant

Enclosures: Photo Log
Sulfolane Analysis Evaluation
NTL Data Transmittals
Chain of Custody/Work Order

cc: John Cherry, Williams Alaska Petroleum, Inc.
Kathleen McCullom, Williams Alaska Petroleum, Inc.
Dave Guinn, Williams Alaska Petroleum, Inc.
Kelly Dygert, Williams Alaska Petroleum, Inc.
Randy Johnson, City of North Pole
Tim Wingerter, ADEC Northern Regional Office

Williams Alaska Petroleum, Inc.
Industrial Compliance Inspection
May 23, 2001

A section of the floating baffle curtain has come loose from the anchor blocks (left center in photo).

Floating section of liner, "whale", in Cell B. Flow to this cell is still being by-passed and stores wastewater containing high concentrations of sulfolane.

Lagoon Cell C, like A and B, are nearly filled to capacity. This is primarily due to the decrease in flow of wastewater to the City of North Pole containing elevated sulfolane concentrations.

Hydrogen peroxide is being injected between Cells A and C to raise dissolved oxygen levels and reduce sulfolane concentrations.

Marylou Richard (NTL) and Kelly Dygert (Williams) prepare containers and labels for an effluent sample while Dave Guinn (Williams) and Randy Johnson (City of North Pole) observe,

Marylou Richard (NTL) collects a BTEX sample.

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Williams Alaska Petroleum, Inc.
1100 H & H Lane
North Pole, AK 99705
Attn: Dave Guinn
Phone: (907) 488-0054
Fax:

COC #: 26463
NTL Lab#: F203966
Sample Matrix: Wastewater
Location/Project: Biannual Indust. Compliance Monitoring
Client Sample ID: Effluent Comp

Report Date: 6/25/01
Date Arrived: 5/23/01
Date Sampled: 5/23/01
Time Sampled: 9:36 AM
Sampled By: MLR

MRL = Method Reporting Limit

Flag Definitions
B = Below Regulatory Minimum
H = Above Regulatory Maximum
M = Matrix Interference
* = Less Than Reporting Limit

Comments:
**Field Data: pH=7.8, Temp=72.0 °F, Conductivity=9400us/cm.

Method	Parameter	Result	Units	Flag	MRL	Analysis Date
EPA 200.7	Copper Total	< MRL	mg/L	*	0.009	6/14/01
EPA 200.7	Nickel Total	< MRL	mg/L	*	0.02	6/14/01
EPA 200.7	Zinc Total	0.06	mg/L		0.04	6/14/01
EPA 200.9	Arsenic Total	0.036	mg/L		0.004	6/12/01
EPA 200.9	Cadmium Total	< MRL	mg/L	*	0.0006	6/19/01
EPA 200.9	Lead Total	< MRL	mg/L	*	0.004	6/21/01
EPA 200.9	Selenium Total	< MRL	mg/L	* M	0.004	6/22/01
EPA 200.9	Silver Total	< MRL	mg/L	*	0.0002	6/15/01
EPA 245.1	Mercury	< MRL	mg/L	*	0.0002	5/29/01
SM 2540-D	Total Suspended Solids	41	mg/L		8.3	5/25/01
SM 5210-B	Biochemical Oxygen Demand	310	mg/L		6.0	5/23/01
SM 5220-C	Chemical Oxygen Demand	660	mg/L		25	5/24/01
SM4500-NH3-E	Ammonia-N	29	mg/L		1	5/24/01

Reported by Jeremy Nicoll
Fairbanks Chemistry Supervisor

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Williams Alaska Petroleum
1100 H & H Lane
North Pole, AK 99705

Attn: Dave Guinn

Client ID: Effluent Grab
Client Project #:
Source:
NTL Lab#: A172835
Sample Matrix: Wastewater
Comments: Biannual Industrial Compliance Monitoring

Report Date: 6/6/01
Date Arrived: 5/24/01
Sample Date: 5/23/01
Sample Time: 9:08
Collected By: MLR

** Legend **

MRL = Method Report Level
MCL = Max. Contaminant Level
B = Present In Method Blank
E = Estimated Value
M = Matrix Interference
H = Above MCL
D = Lost To Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
EPA 1664						
	Oil and Grease	mg/L	8.16	2.04	5/24/01	5/31/01
EPA 602						
	Benzene	ug/L	0.40	0.30		6/2/01
	Chlorobenzene	ug/L	<MRL	0.30		
	1,2-Dichlorobenzene	ug/L	<MRL	0.50		
	1,3-Dichlorobenzene	ug/L	<MRL	0.50		
	1,4-Dichlorobenzene	ug/L	<MRL	0.50		
	Ethylbenzene	ug/L	<MRL	0.20		
	Toluene	ug/L	<MRL	0.50		
	m,p-Xylene	ug/L	<MRL	0.50		
	o-Xylene	ug/L	<MRL	0.30		
	4-Bromofluorobenzene	% Recovery	107			

wendy m mitchell

Reported By: Wendy M. Mitchell
Anchorage Laboratory Manager

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Williams Alaska Petroleum
1100 H & H Lane
North Pole, AK 99705

Attn: Dave Guinn

Client ID: Travel Blank
Client Project #:
Source:
NTL Lab#: A172836
Sample Matrix: Water
Comments: Biannual Industrial Compliance Monitoring

Report Date: 5/31/01
Date Arrived: 5/24/01
Sample Date: 5/22/01
Sample Time: 15:30
Collected By: MLR

** Legend **

MRL = Method Report Level
MCL = Max. Contaminant Level
B = Present In Method Blank
E = Estimated Value
M = Matrix Interference
H = Above MCL
D = Lost To Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
EPA 602						
	Benzene	ug/L	<MRL	0.30		5/24/01
	Chlorobenzene	ug/L	<MRL	0.30		
	1,2-Dichlorobenzene	ug/L	<MRL	0.50		
	1,3-Dichlorobenzene	ug/L	<MRL	0.50		
	1,4-Dichlorobenzene	ug/L	<MRL	0.50		
	Ethylbenzene	ug/L	<MRL	0.30		
	Toluene	ug/L	<MRL	0.50		
	m,p-Xylene	ug/L	<MRL	0.50		
	o-Xylene	ug/L	<MRL	0.30		
	4-Bromofluorobenzene	% Recovery	99			

wendy m mitchell

Reported By: Wendy M. Mitchell
Anchorage Laboratory Manager

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ANALYTICAL SERVICES ORDER AND CHAIN OF CUSTODY FORM

PLEASE PRINT CLEARLY & FIRMLY

№ 26463

Client name and address: Williams Alaska Petroleum, Inc. 1100 H & H Lane North Pole, AK 99705	Phone: 488-2054 / FAX: / EMail:	NTL Account Number:
Contact: Dave Gunn	PWS No:	PAYMENT INFORMATION: P.O. or Contract #: ___ Authorization#: ___ Invoice #: ___ Cash or check payable to NTL: ___ Credit Card: (Please call for phone order)
Reporting Format: X Regular ___ Data Deliverable	Send results to ADEC: ___	
Sampled by: MLR	Project information: Biannual Industrial Compliance Monitoring	

Comments: * Results to MLR. Please include field data on data transmittal. pH 7.8, temp 72.0 °F, Cond 940 us/cm

Requested Analysis

Client Sample ID:	Sample Date/Time:	Matrix:	NTL ID#:	Number of Containers	Purgeable Aromatics	Oil & Grease	BOD, TSS, COD	Ammonia	As, Cd, Pb, Se (GFA) Cu, Ni, Ag, Zn (ICP), Hg	CN
Effluent Grab	5/23/01 0908	WW	(A)	4	3	1				
Effluent Comp	5/23/01 0934	WW	F203766	5			2	1	1	
Travel Blank	5/22/01 1530	DI	(C)	2	2					

Relinquished by: [signature]	Date/Time: 1112 5/23/01	Received by: 1118 LMW 5-23-01
Relinquished by: 1118 LMW 5-23-01	Date/Time:	Received by:
Relinquished by:	Date/Time:	Received by:

To be completed by NTL
Sample Received: ___ ANC ___ FAI
COC Seal Intact? ___ Yes ___ No ___ N/A
Temperature on Arrival: ___ °C
Comments: NH_3, COD w/ H_2SO_4 pres O&G w/ 3 ml H_2SO_4 LMW 5-23-01 metals w/ HNO_3 pH<2

Client Signature: ______________________

By signing, I have read and accepted the terms and conditions outlined on the back of this form or as otherwise stipulated in the above referenced contract or purchase order.

North Pole Refinery - Laboratory
1100 H&H Avenue
North Pole , Alaska 99705
Phone: (907) 488-0016 Fax: (907) 488-0016

ANALYTICAL REPORT

Sample Description:	WAPI Effluent	Date/Time Sampled:	5/23/01	900
Lab Sample Number:		Date/Time Received:	5/23/01	1000
Project Number:	ENVI 01-002			
Proponent:	Dave Guinn	Sample Matrix:	wastewater	
		Preservation:	none	
		Sample Details:	none	

EPA Method	Parameter	Result	Units	MDL	Analysis Date
APHA 5210B	BOD	236	mg/L	6	5/23/01
APHA 2540D	TSS	50	mg/L	9	5/23/01
HACH 2-160	COD	640	mg/L	10	5/23/01
1664A	Oil and Grease	15.62	mg/L	3	5/24/01
Metals results from Columbia Analytical Services:					
7060A	Arsenic	33	ug/L(ppb)	5	6/7/01
6010B	Cadmium	ND	ug/L(ppb)	5	6/7/01
7241	Lead	ND	ug/L(ppb)	2	6/7/01
7740	Selenium	ND	ug/L(ppb)	5	6/7/01
6010B	Copper	ND	ug/L(ppb)	10	6/7/01
6010B	Nickel	ND	ug/L(ppb)	20	6/7/01
6010B	Silver	ND	ug/L(ppb)	10	6/7/01
6010B	Zinc	47	ug/L(ppb)	10	6/7/01
7470A	Mercury	0.2	ug/L(ppb)	0.2	6/7/01

Analyst:
Reviewer: 7/10/01